

THE FOLLOWING IS THE ENGLISH TRANSLATION OF THE
ANNEXES TO THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT UNDER ARTICLE 34:
Amended Sheets (pages 10-12)

CLAIMS

1. A process for the formation of nanostructures including:

5 - the formation of nucleation sites (4), in volume, by the irradiation of a substrate (2) using a beam of silicon or germanium ions, by the localised deposition of atoms suitable for the formation of such sites,

10 - the growth of nanostructures (8) by chemical vapour deposition on the nucleation sites thus formed.

2. A process according to claim 1, with
15 the substrate in a dielectric material.

3. A process according to claim 2, with the substrate being in silicon dioxide (SiO_2) or an aluminium oxide (Al_2O_3) or a silicon nitride (SiN_x).
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4. A process according to one of claims 1 to 3, with the nanostructures formed being in a semiconductor material.

25 5. A process according to claim 4, with the germanium semiconductor material being silicon or germanium.

30 6. A process according to claim 5, with the structures formed being created respectively by means of dichlorosilane or germane, as a gaseous

precursor.

7. A process according to claim 4, with the semiconductor structure formed being in a semiconductor material of the column IV type.

8. A process according to claim 7, with the semiconductor structure formed being in silicon carbide (SiC) or in Diamond C.

9. A process according to claim 4, with the semiconductor structure being in a type III - V semiconductor material.

10. A process according to claim 4, with the semiconductor structure being in gallium arsenide (GaAs), or in gallium nitride (GaN), or in gallium phosphide (GaP).

11. A process according to one of claims 1 to 3, with the nanostructures formed being in a metallic material.

12. A process according to one of claims 1 to 11, with the nanostructures formed being in 3 dimensions.

13. A process according to one of claims 1 to 12, with the nanostructures formed being of maximum diameter D between 1nm and 15nm.

14. A process according to one of claims 1 to 13, with the nanostructures being formed at a density of between $10^8/\text{cm}^2$ and $10^{13}/\text{cm}^2$.